



Maintaining Safe, Healthy and Secure Environment

INTRODUCTION

Work conditions affect the physical and mental health of individuals, causing stress. Occupational health is a specialised service to attend to the health needs of workers. It focusses on the promotion of healthy practices for maintaining the physical and mental well-being of workers related to various fields. If we observe closely, the health needs of workers, the practices followed by an organisation must protect and prevent hazards to people or environment. A hazard may be a risk or threat to the health and safety of people. At a workplace, the commonly faced hazards are physical, chemical, biological or psychosocial in nature. While working in the health care sector, the major hazards encountered can be exposure to heat, light, various sound frequencies, radiation, toxic chemicals, infectious diseases and mental tensions. We have to be aware that treatment is not available for most of the occupational diseases that develop gradually. As per the recommendations of the World Health Organization (WHO) and International Labour Organization (ILO), any organisation employing more than 200 workers must have an Occupational Health Service formed by professionals, including medical officers, health administrators and staff to promote health, provide

preventive services, and facility for emergency medical care to workers.

This session gives an insight into the health practices that must be followed to ensure the safety of health care workers and patients.

SESSION 1: PROMOTING A SAFE WORKING ENVIRONMENT



Fig. 5.1 Bio-environment safety

To promote a safe working environment, the following measures must be adopted:

- A person must be aware of her/his organisation's health, safety and security procedures, and follow them at work.
- Before you begin work, always:
 - ensure risk assessments, if any.
 - examine the workplace and see if all equipment that you use are safe and meet your organisation's health and safety policies in order to rule out risks, if any.
 - try to eliminate anything that might pose a health and safety hazard.
- Ensure that patients' needs and choices are fulfilled. Take into account all measures that protect your own safety and that of patients, staff and others while at work.
- Work within the limits of your own role and responsibilities in relation to health and safety.
- Take the help of your supervisors to sort out health and safety problems wherever and whenever necessary.
- Report health and safety issues to superiors in line with the law and your organisation's policies.

How to prevent hazards at the workplace

In order to ensure the elimination of all possible risks while working with others, you must try to:

- ensure that your own health and hygiene do not pose a risk to others.
- take appropriate action in case of an accident or injury or harm.
- check the presence of crowd at your workplace.

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- use approved procedures under supervision when carrying out work that could be dangerous.
- use correct moving and handling techniques.
 - Follow hygiene procedures.
 - Wear protective clothes to handle exigencies.
 - Use and store equipments and materials safely, while dealing with spillages and getting rid of waste.
- take immediate and appropriate action to deal with emergencies, like:
 - fire
 - security problems
 - accidents
- use your skills and experience until help arrives.
- inform for appropriate help.
 - Continue to provide help to a person under supervision, until someone who is qualified enough to deal with the emergency is available.
 - Support the patient and others, including family members, who may have been affected.
 - Record and report incidents and emergencies to superiors, accurately in accordance with your organisation's policies.

Hospital electrical safety measures



Fig. 5.2 Hospital electrical equipment

- Use electrical equipment for the intended purpose only.
- Keep television sets and all other electrical equipment and appliances away from bathtubs and washbasins.
- Check all small appliances before use to ensure that they are maintained and in working order. Ensure periodic maintenance of all electrical equipment and appliances.
- Remove a plug from the wall socket by holding the plug and not the cord.
- Do not overload an electrical outlet point.
- Never use faulty equipment. If an appliance overheats, produces shock or gives an odour while being used, remove it from the area. Follow procedures to have the appliance evaluated by maintenance staff.



Hospital fire safety measures

Hospital fire safety measures are important and must be followed at all times.

1. Despite the use of fire-resistant material and compliance with regulations, fire accidents still happen. Health care organisations must have regular fire drills so that all personnel working there know exactly what to do. Health care personnel, like a General Duty Assistant, must be trained in:
 - fire prevention
 - location and use of fire alarms
 - location and use of fire extinguishers
 - location of emergency exits
 - evacuation procedures
2. Oxygen supports combustion. Posters showing that oxygen is in use must be pasted wherever applicable. If a patient is being administered oxygen, ensure that the patient, her/his roommates and visitors are aware that smoking is prohibited in the area.
3. In case of a fire, follow these steps:
 - Activate the fire alarm procedures.
 - Turn off the oxygen knob, lights and all other electrical equipment in the vicinity of fire.
 - Evacuate patients who are in danger.
 - Signboards, notifying 'switchboards' in a hospital, must be prominent, along with glow signboards of fire extinguishers.
 - Close windows and doors to stop ventilation.
 - Use fire extinguisher to extinguish the fire.
 - Ask patients, who are not at risk, to return to their respective rooms.



Fig. 5.3 A fireman at work

Patient care environment safety measures

The environment safety measures to be followed for patient care are as follows:

1. Identify patients at risk for injury. Those at risk specifically may include:
 - elderly or mentally ill patients
 - patients with impaired vision or hearing
 - patients with impaired mobility (wheelchairs, walkers and partial paralysis)

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NOTES

- patients with a history of falls
 - patients with a history of substance abuse
 - patients receiving medication that interferes with motor-neuron functions
2. Protect patients at risk from injuries.
3. Prevent falls by:
- placing the bed at a lower position
 - keeping the bedside railing up when the patient is not receiving bedside care
 - advising the patient to wear low-heeled shoes when walking
 - ensuring that non-skid strips or mats are affixed near bathtubs and shower areas
 - ensuring that bathtubs have supporting handrails in place
 - warning patients and visitors when floors are wet and slippery
 - signboards must be placed at the time of housekeeping
4. Prevent patients from burns caused by hot liquids.
- placing coffee, tea, and other hot liquids on a table where the patient can reach easily and safely
 - carefully following the prescribed norms when using hot water bags or heating pads as many health care facilities do not allow their use because of the danger of burning patients
5. Prevent the spread of infections. A hospital or a health care facility may follow its own policies to control infections. However, the procedures, generally, followed by and large are those recommended by the Center for Disease Control (CDC), a US agency that studies various pathogenic organisms, spread of contagious diseases and methods used to control the spread of infections. Some of the preventive tips are as follows:
- Preventing diseases due to infections is a priority in hospital care services. A General Duty Assistant must use disinfection and sterilisation techniques that prevent the spread and growth of microorganisms.



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- Two methods are used to eliminate the presence of microorganisms, and thus, prevent infections. These two methods are 'surgical' and 'medical' asepsis.
 - ❑ Surgical asepsis eliminates the presence of all microorganisms. This practice is also called sterilisation or sterile asepsis, like washing the hands and arms with some germicidal solution.
 - ❑ Medical asepsis refers to the practice that reduces the number and inhibit the growth of microorganisms, especially pathogens or disease-causing bacteria.
 - ❑ The technique of asepsis mandates the use of anti-microbial agents, hand washing and cleaning the equipment.



Fig. 5.4 Disinfecting hands

Check Your Progress

A. Multiple Choice Questions

1. The major emergencies, usually, occurring in hospitals are due to fire, security problems and _____.
 - (a) road accidents
 - (b) drowning
 - (c) electrical shock
 - (d) None of the above
2. A General Duty Assistant must be trained in fire prevention, for the use of fire alarm and to locate _____.
 - (a) electrician
 - (b) emergency exits
 - (c) trees
 - (d) None of the above
3. If oxygen knob is on, then _____ is prohibited.
 - (a) sleeping
 - (b) eating
 - (c) smoking
 - (d) None of the above

B. Short Answer Questions

1. Enumerate the fire safety measures to be followed in hospitals.
2. Describe the environment safety measures that need to be adopted for patient care.
3. List the electrical safety measures to be followed in hospitals.

